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•	Application No.	Applicant(s)
Nation of Allowshills	10/813,835	LANGLEY ET AL.
Notice of Allowability	Examiner	Art Unit
	Charles D. Garber	2856
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate communates. This application is su	this application. If not included nication will be mailed in due course. THIS
1. This communication is responsive to <u>4/17/2006</u> .		•
2. The allowed claim(s) is/are <u>2-6</u> .		
<ul> <li>3. ☐ Acknowledgment is made of a claim for foreign priority units.</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> <li>2. ☐ Certified copies of the priority documents have</li> </ul>	e been received.	·
3.  Copies of the certified copies of the priority do	cuments have been received	in this national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv		
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.	
(a) $\square$ including changes required by the Notice of Draftspers	son's Patent Drawing Review	( PTO-948) attached
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner' Paper No./Mail Date	's Amendment / Comment or i	n the Office action of
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the		
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT</li> </ol>		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Info	ormal Patent Application (PTO-152)
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ₩ Interview Sur Paper No./N	* * * * * * * * * * * * * * * * * * * *
3. Information Disclosure Statements (PTO-1449 or PTO/SB/0	′ Paper No./N 08), 7. ⊠ Examiner's A	lail Date mendment/Comment
Paper No./Mail Date 4.	8. 🗌 Examiner's S	tatement of Reasons for Allowance
of Biological Material		
	9. 🗌 Other	cal 1
·		CHARLES GARBER PRIMARY EXAMINER

U.S. Patent and Trademark Office PTOL-37 (Rev. 7-05)

## **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William S. Dorman on 4/17/2006.

The application has been amended as follows:

Cancel claim 1;

Change claims 2, 3, 5 to read:

2. An inspection robot adapted to traverse the interior of a pipeline for the purpose of checking the coating at the interior surface of the pipeline at the weld seams thereon to determine the thickness of the coatings and for detecting for voids or holidays by means of a conductive brush that sweeps against the weld seam and emits a spark when a void is encountered, the spark emission causing a holiday marker to activate and mark the pipeline interior surface so that the site can be revisited for repair, a mil gauge probe mounted on a slideable plunger for measuring coating thickness on the weld seam and providing data via a digital mil gauge readout, the conductive brush, the slidable plunger for the mil gauge probe, the digital mil gauge readout, and a forward portion of the robot all being provided with cameras which simultaneously monitor the movements and data encountered by the inspection robot to provide real-time feedback to a remote operator, wherein the holiday marker is a spray unit located

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adjacent the conductive brush such that when the conductive brush emits a spark, the spray unit will be actuated to place a circumferential mark on the inner circumference of the pipeline adjacent the weld seam and wherein the actuation of the spray unit will cause the brush to rotate in a reverse direction against the inside of the pipeline following which the holiday marker will again be actuated to spray a second circumferential mark on the interior of the pipeline adjacent to the weld seam.

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- 3. An inspection robot adapted to traverse the interior of a pipeline for the purpose of checking the coating at the interior surface of the pipeline at the weld seams thereon to determine the thickness of the coatings and for detecting for voids or holidays by means of a conductive brush that sweeps against the weld seam and emits a spark when a void is encountered, the spark emission causing a holiday marker to activate and mark the pipeline interior surface so that the site can be revisited for repair, a mil gauge probe mounted on a slideable plunger for measuring coating thickness on the weld seam and providing data via a digital mil gauge readout, the conductive brush, the slidable plunger for the mil gauge probe, the digital mil gauge readout, and a forward portion of the robot all being provided with cameras which simultaneously monitor the movements and data encountered by the inspection robot to provide real-time feedback to a remote operator, wherein the conductive brush is mounted on an air cylinder and wherein a signal to the air cylinder will cause the brush to move against the interior surface of the pipeline at the weld seam.
- 5. An inspection robot adapted to traverse the interior of a pipeline for the purpose of checking the coating at the interior surface of the pipeline at the weld seams

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thereon to determine the thickness of the coatings and for detecting for voids or holidays by means of a conductive brush that sweeps against the weld seam and emits a spark when a void is encountered, the spark emission causing a holiday marker to activate and mark the pipeline interior surface so that the site can be revisited for repair, a mil gauge probe mounted on a slideable plunger for measuring coating thickness on the weld seam and providing data via a digital mil gauge readout, the conductive brush, the slidable plunger for the mil gauge probe, the digital mil gauge readout, and a forward portion of the robot all being provided with cameras which simultaneously monitor the movements and data encountered by the inspection robot to provide realtime feedback to a remote operator, wherein the robot is provided with an antenna capable of transmitting information concerning the cameras and operation of the holiday detector and the mil gauge probe to a remote antenna mounted on a remote unit and in communication with the antenna on the robot, the remote unit being operated by a remote operator having a remote controller and a video display whereby the remote operator can actuate the inspection robot to perform any of the functions performed by the inspection robot.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Garber whose telephone number is (571) 272-2194. The examiner can normally be reached on 8:00 a.m. to 4:30 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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